Mirage SIM

The Ultimate in Simulation and Seamless Image Mapping

Christie's MirageSIM is the ultimate in high performance, high brightness projection for simulation applications.

Simulation requires high resolution and high contrast to realize images that are authentic, crisp and tangible representations of the source. The first purpose-built 3-chip DLP simulation projector, the MirageSIM combines several key simulation features into one ultimate simulation tool.

Based on an SXGA resolution (1280 x 1024) light engine with dark metal DMDs, the MirageSIM features higher contrast ratios and improved black level, so the image you display is as close to reality as you get without being there. The MirageSIM is fast too – the minimum frame delay feature minimizes the propagation delay between the projector input and the screen display, providing sharp, vibrant images without loss of detail, flicker or motion artifacts.

Christie's built-in edge blending software allows for multi-channel display with blending on all four sides of the image. External opto-mechanical adjustable blinders, mounted on projection lenses, offer further blending of black levels for an incredible seamless image.

At 4000 ANSI lumens, the MirageSIM is powerful for high ambient light conditions – no need to work in the dark any longer! The Brightness Uniformity and LiteLOC™ features provide consistent and constant use of that brightness without loss of image quality. Center-to-edge brightness can be adjusted for precise uniformity and the overall brightness of the projector remains constant over time. Our Primary Color Adjust (PCA™) ensures true color representation, color matching and uniformity across multi-screen images.

Recreate Reality…with Christie's MirageSIM!

- **4000 ANSI lumens and 1000:1 on/off contrast ratio**
- **SXGA resolution (1280 x 1024) with dark metal DMDs**
- **Built-in edge blending (software and opto-mechanical blinders included)**
- **110 VAC operation**
- **Brightness uniformity**
- **PCA™ Primary Color Adjustment for RGB color matching across multiple screens**
- **SLIC™ Spatial Light Image Construction**
- **LiteLOC™ constant brightness tracking**
- **MFD™ Minimum Frame Delay**
- **Wide range of optional lenses, modules and accessories**
- **Lens mount tilt adjustment**

APPLICATIONS

- Aircraft, Ship's Bridge and Land Vehicle Simulators
- Driver Training
- Air Traffic Control Simulators
- Design Simulation
- Architecture, Engineering and Construction
- Research and Development
- Military Training
- Entertainment

CHRISTIE

Project. Present. Perform.

MirageSIM • Specifications

Brightness
- 4000 ANSI lumens
- Over 90% brightness uniformity

Contrast Ratio
- 300:1 ANSI; 1000:1 full field

Resolution
- True SXGA 1280 x 1024 chip resolution
- 16.7 million displayable colors
- Christie's 3-DMD™ Optical System (SLIC™) featuring new Dark Metal DMDs for improved black level and contrast ratio
- 13-bit user selectable gamma table

Input Horizontal Frequency
- 15kHz to 120kHz

Input Vertical Frequency
- 24Hz to 120Hz

Dot Clock
- 160MHz

- Primary Color Adjustment (PCA™)
- Brightness uniformity control
- Intuitive on-screen display (OSD) menus
- Service functions can be password protected
- Multiple language support
- 100 channel memories
- Auto set-up feature

Built-in Edge Blending
- Seamless Image Mapping (SIM) through software and opto-mechanical edge blending
- User programmable overlap regions of 5%-35% on any of four sides of the image
- Easy-to-use through intuitive on-screen display menus
- Soft edge blending enable/disable control
- Blend width control from 48 to 464 pixels
- Horizontal overlap range: 4% - 36%
- Vertical overlap range: 5% - 45%
- Blend mid-point brightness control

Size and Weight
- 88 lbs (39.9 kg)
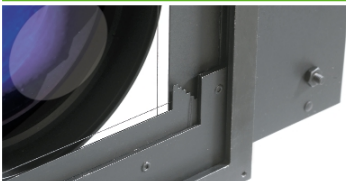- 24.48" W x 30.19" L x 11.88" H; (64.8cm W x 76.7cm L x 30.2cm H)

Standard Accessories
- IR wireless remote (with 4AA batteries)
- 8' line cord
- User manual with warranty card

Optional Accessories
- Wired two-way remote controller (RS422) with LCD display
- Remote IR sensor
- Replacement lamp module
- Multi-standard video decoder (NTSC 3.58, NTSC 4.43, PAL, PAL 60, PAL M, PAL N, SECAM)
- DVI/DFP module
- DVI input module
- Digital HDTV module (SMPTE 292)
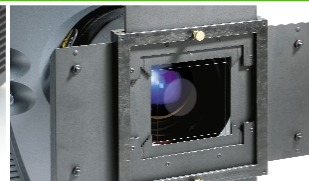- Vista compatible analog input modules

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FEATURES

- *External opto-mechanical blinders feature piano wire to help defray the optical defraction.*
- *High quality optics and electronics, including internal edge blending, make the MirageSIM the reality for simulation.*
- *Lens mount tilt adjustment provides greater flexibility for your application.*

Field Interchangeable Optional Lenses
- Flexibility of installations at various distances from the screen
- 1.2:1 fixed short throw
- Zoom lenses: 1.5-2.2:1, 2.2-4:1 and 4-7:1
- Fixed lens mount with horizontal and vertical lens offset, focus and zoom adjustment
- Screen size: 72" to 480" (1.8m – 12.2m) diagonal image size (lens dependent)
- Compatible with VistaGRAPHX 0.8:1, 2.5-4:1, 4-7:1 with adapter
- Built-in light shutter
- Lens mount tilt adjustment
- Up to 130% of vertical lens offset
- Up to 80% of horizontal lens offset

Dynamic Scaling
- Resizing processing for computers and workstations up to 1600 x 1200 resolution
- Independent horizontal and vertical image size adjustment for graphics and video

Inputs
- Input 1: analog RGB 5 BNC for RGBHV, YPrPb, YCbCr and YUV
- Input 2: optional plug-in input modules
- Separate, composite sync and sync-on-green compatible
- HDTV tri-level sync compatible for all known HDTV formats

Enhanced Feature Set
- Single frame delay between the input and the projected image
- Internal soft edge blending
- External opto-mechanical blinders for black level blending
- Constant brightness tracking (LiteLOC™ - Light Output Control)
- Variable lamp power from 450 to 700W

- Software control of slope of blend function
- Edge blending can be remotely controlled via RS232

Control/Networking
- Auto power-up
- Dual RS232 and dual RS422 communication port
- IR remote keypad
- Front and rear IR receiver
- Optional 2-way controller RS422
- Built-in backlit keypad

Lamp Specification
- 700W CERMAX Xenon® Lamp
- Color temperature range 3200K to 9300K
- Over 1000 hours of lamp life
- User replaceable lamp
- Pre-aligned lamp module

Power Requirements
- Voltage range: (auto-switching) AC 100-220V +/- 10%
- Line frequency: 50 - 60Hz nominal
- Power consumption: 1150W maximum
- In-rush current rating: 50A maximum
- Current rating: 11.5 amps maximum at 100 VAC
- Thermal dissipation: 3950 BTU/hr

Environmental
- Operating temperature: 0 - 35° C
- Operating humidity: 20 - 80% non-condensing

Diagnostics
- Built-in diagnostics LCD display indicates operational status and error messages
- Power and status LEDs
- Full remote diagnostics through RS232 9-pin D connector

- Compatible with selected 3rd party switchers
- Service manual
- Librarian communication software
- Arbitrary gamma table software
- Wired remote backlit keypad
- Motorized lens mount upgrade
- Serial digital input (SMPTE 259M/ CCIR 601)
- 10-bit ADP (Advanced Digital Processing)
- Transit case

Regulatory Approvals
- Safety: CSA C22.2 No. 950, UL 1950, EN609050 European Norm "Safety of Information Technology Equipment"
- Complies with relevant worldwide EMC and safety standards
- The product complies with FCC Class A and EN55022 Class A requirements
- This product conforms to all relevant European directives, standards, safety, health and environmental concerns and bares the CE marking

Warranty
- One year parts and labor
- Accessories: one year

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DLP™
A TEXAS INSTRUMENTS TECHNOLOGY

Due to constant research, specifications are subject to change without notice.

ISO 9001
REGISTERED QUALITY SYSTEM

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